A RESOLUTION BY TRANSPORTATION COMMITTEE

A RESOLUTION INCREASING THE COMPENSATION LIMIT FOR CONTRACT NO. FC-6006007929-E, ARCHITECTURAL AND ENGINEERING DESIGN SERVICES, WITH ASCEND JOINT VENTURE, LLC, IN AN ADDITIONAL AMOUNT OF \$1,195,172; ALL SERVICES WILL BE CHARGED TO AND PAID FROM FDOA 5502 (AIRPORT RENEWAL AND EXTENSION FUND) 180201 (DOA AVIATION CAPITAL PLANNING & DEVELOPMENT) 5212001 (CONSULTING/ PROFESSIONAL SERVICES) 7563000 (AIRPORT) 00000000 (DEFAULT) 000000(DEFAULT); AND FOR OTHER PURPOSES.

WHEREAS, the City entered into Contract No. FC-6006007929-E ("Contract"), Architectural and Engineering Design Services, with Ascend, LLC t/n Ascend Joint Venture, LLC ("Ascend"), pursuant to Resolution 07-R-1459; and

WHEREAS, Ascend has submitted to the Department of Aviation a fee proposal for services in support of the Federal Aviation Administration Geographic Information System Pilot Program and the Airport Utilities Geographic Information System Data Collection for 2009/2010 ("Project"); and

WHEREAS, the Aviation General Manager has determined that it is desirable and in the City's best interest to accept such fee proposal for the Project and increase the compensation limit under the Contract in the amount of \$1,195,172.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF ATLANTA GEORGIA, that the compensation limit for the Contract with Ascend is increased by an additional amount of \$1,195,172.

BE IT FURTHER RESOLVED, that the Aviation General Manager or his designee are each authorized to issue to Ascend Task Orders under the Contract up to the collective amount of all monies legislatively authorized under the Contract pursuant to Code Section 2-1111, including the \$1,195,172 authorized in this Resolution for the Project.

BE IT FURTHER RESOLVED, that Ascend is expected to complete all services rendered for the Project within 120 calendar days from the date such services begin.

BE IT FURTHER RESOLVED, that all contracted services will be charged to and paid from FDOA 5502 (Airport Revenue and Extension Fund) 180201 (DOA Aviation Capital Planning & Development) 5212001 (Consulting/Professional Services); 7563000 (Airport) 0000 (Default) 00000000 (Default) 00000000 (Default).

BE IT FINALLY RESOLVED, that no Task Order will become binding on the City and the City will incur no obligation or liability under it until it has been executed by the Aviation General Manager or his designee and delivered to Ascend.

<u>Part II: Legislative White Paper:</u> (This portion of the Legislative Request Form will be shared with City Council members and staff)

A. To be completed by Legislative Co	unsel:	
Committee of Purview:		
Caption:		
Council Meeting Date:		
Requesting Dept.:		
FAC Confirmed by:		

B. To be completed by the department:

1. Please provide a summary of the purpose of this legislation (Justification Statement).

The Legislation is to authroize the Aviation General Manager or his designee to issue Task Orders to ASCEND, LLC ("ASCEND") Consultants to provide architectural and engineering design services for the Geographic Information Sytems for the Department of Aviation in an amount not to exceed \$1,195,172.

The project will be for the preparation of data for Hartsfield-Jackson Atlanta International Airport (H-JAIA) that is compliant with Federal Aviation Administration (FAA) Advisory Circulars 150/5300-16a, 17b and 18b and for the submission of this data to the FAA's Airports Geographic Information System (AGIS). Task Order will include survey/collection of data for storm water collection systems throughout H-JAIA. Attached is the detailed scope narrative.

2. Please provide background information regarding this legislation.

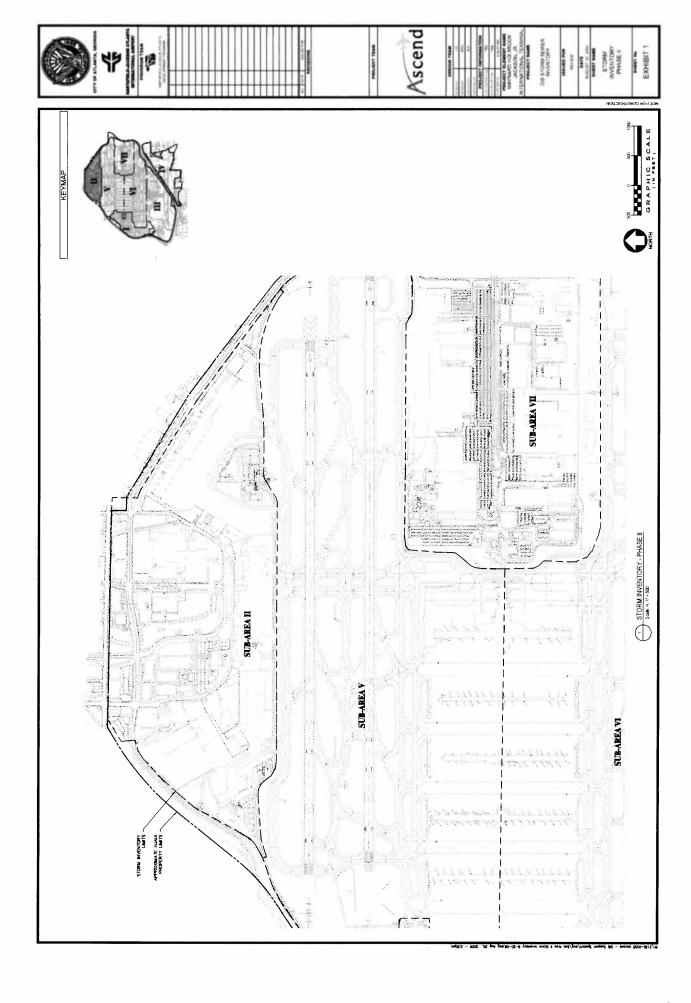
The City of Atlanta entered into an Agreement ("Agreement") with ASCEND, a Limited Liability Company comprised of Post, Buckley, Schuh & Jernigan, Inc. (PBS&J), Prime Engineering, Inc., Delon Hampton & Associates and Street Smarts, Architectural and Engineering Design Services on an as needed basis pursuant to Resolution 07-R-1459.

This Resolution will authorize the Aviation General Manager to prepare and execute appropriate Task Order(s) for Engineering Design Services associated with Contract FC-6006007929-E in support of the design for Geographic Information Systems (GIS) project at H-JAIA. The benefit to be realized from this service is to convert the data collected into a GIS format and be included in the DOA's GIS Utilities Database.

3. <u>If A</u>	pplicable/Known:		
(a)	Contract Type (e.g. Professional Services, Construction Agreement, etc): Professional Services		
(b)	Source Selection:		
(c)	Bids/Proposals Due:		
(d)	Invitations Issued:		
(e)	Number of Bids:		
(f)	Proposals Received:		
(g)	Bidders/Proponents:		
FDOA 52120	Term of Contract: Three (3) years with two (2) one (1) year renewal options. d Account Center (Ex. Name and number): All contracted services will be charged to and paid from 5502 (Airport Revenue and Extension Fund); 180201 (DOA Aviation Capital Planning & Development) (Consulting/Professional Services); 7563000 (Airport); 0000 (Default); 000000000 (Default) (000 (Default)).		
Fund:	Account: Center:		
5. Soı	rce of Funds: Example: Local Assistance Grant R&E / Grant		
6. Fis	cal Impact: \$1,195,172.		
-	le: This legislation will result in a reduction in the amount of to Fund Account Center er		
7. M et	hod of Cost Recovery:		
Examı	les:		

- a. Revenues generated from the permits required under this legislation will be used to fund the personnel needed to carry out the permitting process.
- b. Money obtained from a local assistance grant will be used to cover the costs of this Summer Food Program.

This Legislative Request Form Was Prepared By: Marsha Love-Brown / David Wright



H-JAIA Participation in the FAA Airports-GIS Pilot Program Scope of Work

Objective

The objective of this project is to prepare data for the Hartsfield-Jackson Atlanta International Airport (H-JAIA) that is compliant with Federal Aviation Administration (FAA) Advisory Circulars 150/5300-16a, 17b and 18b and submit this data to the FAA's Airports Geographic Information System (AGIS). This data will also be merged into H-JAIA's existing Geographic Information System (GIS) so that the airport can maintain compliance in the future. In addition to the data that will be produced, an important outcome of this project will be familiarity, experience and procedures that will help airport staff and consultants maintain compliant data. As this initial submittal to AGIS is prepared, H-JAIA staff and consultants will submit feedback to the FAA that may help other airports achieve similar objectives.

Preparation

As part of its on-going GIS program, H-JAIA has embarked on a number of activities that prepare the airport for participation in the AGIS Pilot Program. Specifically, within the last six months the airport has:

- Begun an airport layout plan update using GIS data and software
- Improved its network of control monuments (including primary and secondary airport control stations) in a manner that complies with AC 150/5300-16a and submitted this data to the National Geodetic Survey (NGS) for inclusion in the National Spatial Reference System (NSRS).
- Captured aerial photography which complies with AC 150/5300-17b and covers a geographic extent which meets FAA requirements.
- Established a GIS database that adheres to and augments AC 150/5300-18b.
- Competitively awarded a contract, that complies with FAA procurement regulations, to a team of consultants that have skills and experience developing compliant data.
- Consulted with the national AGIS program office and local Airports District Office (ADO) on the development of this scope of work.

Tasks

The following tasks have or will be completed in order to fulfill the objectives stated above. Tasks in *italics* are related to this effort but have already been completed by H-JAIA. These are identified because of their relevance to this project. H-JAIA will not be seeking reimbursement for these completed tasks.

Deliverables and data sets are identified under the task in which they will be prepared. In addition, Attachment B lists all AC150/5300-18b feature classes and attributes¹ identifying the source of the required information, the consultant team member responsible for preparing the data and the H-JAIA staff member who is responsible for maintaining the data after the completion of this project.

¹ With the exception of features and attributes in the Seaplane category which are not applicable to H-JAIA.

- 1. Register with FAA Airports-GIS Site A first step in any FAA Airports-GIS project is for the airport sponsor to obtain credentials to log into the FAA'a Airports-GIS site and then to set up a new project on this site. All data prepared and submitted to the FAA will be loaded into this project on the FAA site.
 - 1.1. Obtain log-in credentials for H-JAIA project manager The project manager for H-JAIA will browse to www.airports-gis.gov and request log-in credentials from the FAA.
 - 1.2. Establish new project in the Airports-GIS site Once the project manager for H-JAIA receives project credentials from the FAA, he will log into the Airports-GIS site and establish a new project for this effort.

2. Establish Geodetic Control

- 2.1. Investigate and correct the location and condition existing survey monuments.
 - 2.1.1. Locate all monuments Previous efforts already completed and funded by H-JAIA located and validated the position of H-JAIA survey control monuments, including the PACS and SACS with static GPS observations and RTK GPS observations to achieve the most accurate positions possible with current technology. While a similar procedure was used, the exact procedure required by AC150/5300-16a was not followed. To address this, the PACS and SACS will be located using the required procedures and the required sketches and field photos will be taken.
 - 2.1.2. Report and correct inaccuracies of existing control points.
 - 2.1.3. Set new monuments where existing ones have deteriorated.
- 2.2. Establish new survey monuments
 - 2.2.1. Analyze the location of existing monuments and recommend new monument locations to achieve required density, coverage and inter-visibility.
 - 2.2.2. Set new monuments in recommended locations. A Primary Airport Control Station (PACS) and two Secondary Airport Control Station (SACS) were recovered and/or established recently under a separate project funded by the airport. Establishing a new SACS in the vicinity of Gate 59 is, however, recommended. This new SACS is required due to accessibility issues and instability of the current SACS in the southern portion of the airport property. This new monument will be established in accordance with FAA AC 150/5300-16A and NGS specifications for a Stability "B" monument. By definition, a new SACS, being in the category of permanent control shall be incorporated into the NSRS and, therefore, will meet the requirements of NGS Blue Book to be included in the NSRS.
- 2.3. Develop a coordinated set of survey monument locations (using existing and new monuments). A digital loop will be run through all monuments and a least squares network adjustment will be performed to achieve first order vertical accuracy
- 2.4. Submit data to NGS so that the SACS is included in the NSRS.

Feature Class Prepared:

• AirportControlPoint - PACS/SACS

2.5. Prepare Survey Monument Deliverables as required by AC 150/5300-16A

Deliverables Prepared:

- Quality Control Plan
- Survey Plan
- Project Sketch
- Field Logs
- Vector Processing Output
- Final Project Report
- Adjustment and Checking Programs
- Original Data
- Descriptions
- Transmittal letter
- 2.6. Submit Survey Monument Deliverables required by AC 150/5300-16A

3. Collect Aerial Photography

- 3.1. Plan flights for aerial imagery and Light Detection And Ranging (LIDAR) data collection
- 3.2. Establish photo recognizable ground control
- 3.3. LIDAR Elevation Data Collection
 - 3.3.1. Develop LIDAR flight plan
 - 3.3.2. Collect raw LIDAR data This was collected and funded separately by the airport.
 - 3.3.3. Prepare DEM from LIDAR
 - 3.3.4. Prepare Elevation Contours (10' intervals, accurate to 5') A variety of existing data including recently collected LIDAR data, a Digital Elevation Model prepared in Clayton & Dekalb counties, and Fulton County GIS elevation data will be used to prepare 10' contours for the entire imagery collection area.

H-JAIA requires 1' contours to meet internal requirements. Such contours can be developed for the airfield from the imagery and LIDAR that has been collected. While H-JAIA may prepare this data at its own cost, the time and cost to prepare this data is not included in this scope of work. If H-JAIA opts to prepare this data at its own expense the data can be uploaded to AGIS if the FAA desires.

Feature Class Prepared:

• Elevation Contours – FAA requires elevation contours every 10' for Part 139 airports. FAA AC 150/5300-18B states that the horizontal and vertical accuracy of these contours must be ½ the contour interval.

3.4. Stereo imagery

3.4.1. Collect leaf-off imagery – Leaf-off imagery was collected in February of 2009. While the more recent lead-on imagery collected under Task 3.4.2 will be the primary source

- used to update H-JAIA's planimetric data, this imagery will be helpful when depicting off airport features which may be obscured by leaf cover (e.g. roads).
- 3.4.2. Collect leaf-on imagery Leaf-on imagery was collected in July/August of 2009. This more recent leaf-on imagery will be used as the basis for planimetric data development (Task 6.1). The extent of this imagery covers all of the applicable obstruction identification surfaces.
- 3.4.3. Tie-Photo Control to PACS/SACS The H-JAIA PACS and SACS will be read / tied to with the RTK-VRS (eGPS) method used for establishing values on the Photo Control used for the Aero Triangulation. All sketches/documentation required will be developed.
- 3.4.4. Prepare orthophotos 6" resolution seamless orthophotos will be prepared and delivered in geo-TIFF and SID formats. This task is currently underway and has been funded separately by H-JAIA.
- 3.4.5. Collect Check Points and Verify Orthophoto Accuracy One (1) Hour Static GPS Observations & Collection of Five (5) Check Points processed using OPUS Solutions. All sketches/documentation required will be developed.
- 3.4.6. Prepare ImageArea data depicting the extents of the delivered orthophotos and load into File Geodatabase²

Feature Class Prepared:

- ImageArea
- 3.5. Prepare Imagery Deliverables required by AC 150/5300-17B

Deliverables Prepared:

- Digital Stereo Imagery
- Imagery Control Points
- Georeferencing Information
- Flight Report
- Final Report
- 3.6. Submit Imagery Deliverables required by AC 150/5300-17B

4. Collect Field Survey Data

- 4.1. Identify approximate location of required survey control points using existing data and aerial imagery as a means of planning and streamlining field work.
- 4.2. Coordinate field access with H-JAIA Airside Operations, Security and FAA ATCT
- 4.3. Locate and attribute the following survey points as required by AC150/5300-18B Following is a list of feature classes that will be collected by survey means. All survey data

² H-JAIA has developed FAA AC150/5300-18b compliant SDE and File Geodatabases that will be used to develop data under this scope of work. Because file Geodatabases are not an accepted format for data submittal to the FAA, the final data will be exported from H-JAIA's Geodatabase and converted into ESRI compliant Shape files which will then be uploaded to the FAA Airports-GIS site.

will be collected using Real Time Kinematic (RTK) survey procedures. Some attributes will be populated in the field, while others are more efficiently populated in the office using data collected in the field and other resources. The required attributes and the means used to populate them are listed in Table 1.

Feature Classes Prepared:

- RunwayEnd
- TouchdownLiftOff
- AirportControlPoint Runway Intersection Point
- AirportControlPoint Airport Elevation
- AirportControlPoint Centerline Perpendicular Points
- AirportControlPoint Displaced Threshold Point
- AirportControlPoint Stopway Ends
- AirportControlPoint Profile Points
- AirportControlPoint Touchdown Zone Elevation
- NavigationalAidEquipment Distance Measuring Equipment
- NavigationalAidEquipment End Fire (GS)
- NavigationalAidEquipment Glide Slope
- NavigationalAidEquipment Localizer
- NavigationalAidEquipment Localizer Type Directional Array
- Navigational Aid Equipment MLS Azimuth Antenna
- NavigationalAidEquipment MLS Elevation Antenna
- NavigationalAidEquipment SDF
- 4.4. Prepare features derived from survey control points Following is a list of feature classes that can be derived from certain survey control points (primarily Runway End points). In some cases additional information such as the runway dimensions and assumed aircraft operations are required to derive these features. The required attributes and the means used to populate them are listed in the attachment to this scope.

- RunwayCenterline
- RunwayHelipadDesignSurface
- RunwayProtectionArea
- 4.5. Load field survey data into H-JAIA Geodatabase The feature classes developed in Tasks 4.3 and 4.4 will be uploaded into the H-JAIA Geodatabase, which has been designed to be compliant with FAA AC 150/5300-18b.
- 4.6. Quality Assurance Quality control will be performed on the data as it is being prepared. A final quality assurance step, will ensure that all of the data is compliant with FAA requirements before it is uploaded to the FAA's Airports-GIS web site.
- 4.7. Convert data to shape file format Although the H-JAIA Geodatabase has been designed to be compliant with FAA requirements, data must be uploaded to the FAA Airports-GIS web

site in a compliant format. Where appropriate, FAA provided data conversion tools will be used. In addition, a tool to export data from the H-JAIA Geodatabase in a compliant format will be developed. In this task, data will be exported from the H-JAIA Geodatabase and converted into FAA compliant Shape files that contain all required attributes.

- 4.8. Submit field survey data to the FAA A final shape file that has been checked for compliance with FAA AC150/5300-18B for each of the feature classes listed in Task 4.3 and 4.4 will be uploaded to the FAA's Airports-GIS web-site by the H-JAIA Project Manager. If any data is not accepted by the FAA, it will be corrected by the consulting team member responsible for the failed component(s). The data will then be rechecked and resubmitted to the FAA Airports-GIS web site.
- 4.9. Prepare Interim Report for FAA An interim status report (expected to be 3-5 pages in length) will be drafted by the consulting team and provided to H-JAIA for comment. A final report which includes H-JAIA comments will be prepared and e-mailed to the FAA 2 days prior to an interim status meeting during which project status, issues and next steps will be discussed amongst FAA, H-JAIA and consulting team stakeholders.
 - 4.9.1. Summary of Project Status to Date A brief summary of the project status, work completed and any issues encountered will be provided.
 - 4.9.2. Scope of work activities performed Work completed under each task will be reported along with a percent complete for each task. Any issues encountered will also be described along with recommendations to address each. Any deviations from the proposed scope will be discussed and approved in writing by H-JAIA and the FAA. These will be noted in the interim report.
 - 4.9.3. Costs expended to date for each task will be provided. Any tasks which are expected to be completed significantly (i.e. +/- 10%) over or under the original estimate will be noted. Costs will also be tracked by Feature Class.
 - 4.9.4. Recommendations for improvements to FAA policy, guidance, templates, tools, training and process will be documented.
 - 4.9.5. Status Review Meeting A meeting with project stakeholders representing the FAA, H-JAIA and the consulting team will be conducted to review the status report, discuss issues and coordinate next steps.

Deliverable:

- Interim Status Report
- Minutes from Status Meeting

5. Complete Obstruction and Airspace Analysis

5.1. Derive Obstruction Identification Surfaces – Obstruction Identification Surfaces relevant to the operations at H-JAIA will be derived from Runway End points and other feature as required.

- ObstructionIdentificationSurface
- 5.2. Collect, Consolidate and Convert Obstacle Data

- 5.2.1. Query existing LIDAR data (collected and funded separately by the airport) which are available within the AOA for returns that extend above Obstruction Identification Surfaces. It is understood that LIDAR is not an approved means of producing airfield obstruction data. Because LIDAR data has already been collected, it will be used as a preliminary means of identifying large Obstacles and delineating Obstruction Areas. This preliminary data will only be used to coordinate and streamline the location of Obstacles and Obstruction Areas using photogrammetric and survey means as described below.
- 5.2.2. Photogrammetrically identify obstructions using 2009 leaf-on imagery
- 5.2.3. Review obstructions identified photogrammetrically from 2007 imagery
- 5.2.4. Conduct field check/survey for obstructions
- 5.2.5. Consolidate and attribute obstructions
- 5.2.6. Photogrammetrically create ObstructionArea data from 2009 leaf-on imagery
- 5.2.7. Load Obstruction Identification Surfaces, Obstacles and ObstructionArea data into H-JAIA Submit field survey data to the FAA Geodatabase
- 5.2.8. Submit Obstruction data to FAA

- Obstacle
- ObstructionArea
- 5.3. Load Obstruction Data into H-JAIA Geodatabase The feature classes developed in Tasks 5.1 and 5.2 will be uploaded into the H-JAIA Geodatabase, which has been designed to be compliant with FAA AC 150/5300-18b.
- 5.4. Quality Assurance Quality control will be performed on the data as it is being prepared. A final quality assurance step, will ensure that all of the data is compliant with FAA requirements before it is uploaded to the FAA's Airports-GIS web site.
- 5.5. Convert Data to Shape File Format Although the H-JAIA Geodatabase has been designed to be compliant with FAA requirements, data must be uploaded to the FAA Airports-GIS web site in a compliant format. Where appropriate, FAA provided data conversion tools will be used. In addition, a tool to export data from the H-JAIA Geodatabase in a compliant format will be developed. In this task, data will be exported from the H-JAIA Geodatabase and converted into FAA compliant Shape files that contain all required attributes.
- 5.6. Submit Obstruction Data to the FAA A final shape file that has been checked for compliance with FAA AC150/5300-18B for each of the feature classes listed in Task 5.1 and 5.2 will be uploaded to the FAA's Airports-GIS web-site by the H-JAIA Project Manager. If any data is not accepted by the FAA, it will be corrected by the consulting team member responsible for the failed component(s). The data will then be rechecked and resubmitted to the FAA Airports-GIS web site.
- 5.7. Prepare Interim Report for FAA An interim status report (expected to be 3-5 pages in length) will be drafted by the consulting team and provided to H-JAIA for comment. A final report which includes H-JAIA comments will be prepared and e-mailed to the FAA 2 days

prior to an interim status meeting during which project status, issues and next steps will be discussed amongst FAA, H-JAIA and consulting team stakeholders.

- 5.7.1. Summary of Project Status to Date A brief summary of the project status, work completed and any issues encountered will be provided.
- 5.7.2. Scope of work activities performed Work completed under each task will be reported along with a percent complete for each task. Any issues encountered will also be described along with recommendations to address each. Any deviations from the proposed scope will be discussed and approved in writing by H-JAIA and the FAA. These will be noted in the interim report.
- 5.7.3. Costs expended to date for each task will be provided. Any tasks which are expected to be completed significantly (i.e. +/- 10%) over or under the original estimate will be noted. Costs will also be tracked by Feature Class.
- 5.7.4. Recommendations for improvements to FAA policy, guidance, templates, tools, training and process will be documented.
- 5.7.5. Status Review Meeting A meeting with project stakeholders representing the FAA, H-JAIA and the consulting team will be conducted to review the status report, discuss issues and coordinate next steps.

Deliverable:

- Interim Status Report
- Minutes from Status Meeting

6. Prepare Electronic Airport Layout Plan Data

- 6.1. Update 2007 planimetric data using 2009 imagery H-JAIA has planimetric data that meets or exceeds the accuracy requirements specified in AC 150/5300-18b that was derived from aerial imagery collected in 2007. This planimetric data will be updated based on new imagery that was recently captured. This updated planimetric data will be used as the basis for forming the point, line and polygon data required by AC150/5300-18b.
 - 6.1.1. Phase I will cover features within the Aircraft Operating Area.
 - 6.1.2. Phase II will cover features on airport property but outside of the AOA.
 - 6.1.3. Phase III will cover features within the full imagery extent outside of airport property (covers all obstruction identification surfaces).
- 6.2. Convert planimetric data into GIS format and load into H-JAIA / FAA compliant File Geodatabase.

- AircraftGateStandPoint
- AircraftNonMovementArea
- AirfieldLight
- AirOperationsArea
- AirportSign
- Apron
- ArrestingGear
- DeicingArea

- FrequencyArea
- MarkingArea
- MarkingLine
- MovementArea
- RestrictedAccessBoundary
- Runway
- RunwayArrestingArea
- RunwayBlastPad
- RunwayElement
- RunwayIntersection
- RunwayLabelReferencePoint
- RunwayLAHSO
- RunwaySafetyAreaBoundary
- Shoulder
- Stopway
- TaxiwayElement
- TaxiwayHoldingPosition
- TaxiwayIntersection
- LandmarkSegment
- EnvironmentalContaminationArea
- FaunaHazardArea
- FloodZone
- FloraSpeciesSite
- ForestStandArea
- HazMatStorageSite
- NoiseMonitoringPoint
- Shoreline
- Wetland
- NavigationalAidCriticalArea
- NavigationalAidEquipment Airport Beacon
- Navigational Aid Equipment ARSR/ASR
- NavigationalAidEquipment Approach Light System
- NavigationalAidEquipment Back Course Marker
- NavigationalAidEquipment Fan Marker
- Navigational Aid Equipment GCA Touchdown Reflectors
- NavigationalAidEquipment Inner Marker
- NavigationalAidEquipment Middle Marker
- Navigational Aid Equipment Non-Directional Beacon
- NavigationalAidEquipment Outer Marker
- Navigational Aid Equipment PAPI
- NavigationalAidEquipment PAR Touchdown Reflectors
- NavigationalAidEquipment PLASI
- NavigationalAidEquipment PVASI
- NavigationalAidEquipment REIL

- NavigationalAidEquipment TACAN
- NavigationalAidEquipment TRCV
- NavigationalAidEquipment TVASI
- NavigationalAidEquipment VOR
- NavigationalAidEquipment VASI
- NavigationalAidEquipment VORTAC
- NavigationalAidSite
- SecurityArea
- SecurityIdDisplayArea
- SecurityPerimeterLine
- SterileArea
- Building
- ConstructionArea
- Fence
- Gate
- PassengerLoadingBridge
- Roof
- Tower
- Bridge
- DrivewayArea
- DrivewayCenterline
- ParkingLot
- RailroadCenterline
- RailroadYard
- RoadCenterline
- RoadPoint
- RoadSegment
- Sidewalk
- Tunnel
- UtilityTankSite
- 6.3. Attribute features as required Attributes required to be entered for the feature classes listed in Task 6.2 will be entered into the GIS database using conflation and attribute entry methods. The specific manner in which each attribute is to be populated and which member of the consulting team that is responsible is identified in Table 1.
 - 6.3.1. Conflate data from existing H-JAIA GIS basemap In many cases, H-JAIA has already populated attributes required by the FAA into its existing GIS data sets. In these cases, attribute data will be conflated or transferred from the existing non-compliant GIS data into the new FAA compliant GIS data created by this project.
 - 6.3.2. Enter additional attributes as required In many cases, attributes required by the FAA will not be available in existing H-JAIA GIS data. In these cases, attributes will be developed by the consulting team and entered into the H-JAIA/FAA Compliant Geodatabase.

6.4. Prepare data reflecting AIP projects and proposed future airport configuration(s) - Near-term (2010-2014), future airport projects or improvements shall be represented in the data submitted as specified in AC150/5300-18b. The minimum required attributes for the Airport features that will illustrate applicable, proposed 5-year Capital Improvement Program (CIP) projects specific to the Airport.

Where any future, preliminary design effort and/or GIS data exists specific to a planned project, it should be converted and uploaded into the FAA database for planning purposes only. It shall meet, at a minimum, the known FAA levels of accuracy as acceptable "for planning purposes only". If no detailed guidance is available, there will be coordination with FAA as to reasonableness and acceptability of data.

The projects specific to ATL to be reflected in the data submitted are included in the current Airport 5-year CIP. As project changes to the CIP are possible in response to industry needs and demands, no more than 10 major near-term airport projects will be included in the scope for GIS data collection, conversions, upload, verification/validation and depiction. Other future projects may can be captured under a separate scope of work.

Examples of major proposed airport projects applicable to ATL might be: Ry 27R extension (500'), Ry 9L extension (835'), Taxiway W construction, additional high speed taxiways, Terminal expansion to West, S. Gate Complex construction, etc. Minor future projects might include Ry 26R ALSF2 upgrade.

Areas of aeronautical and non-aeronautical land uses on the airport should be identified to maintain protection of future uses and their associated airspace.

- 6.4.1. Identify H-JAIA AIP projects to be reflected in the data submitted.
- 6.4.2. Collect planning CADD drawings for each project Only projects which have completed plan drawings will be depicted in the data developed under this scope. Projects that do not have plan drawings will be added and submitted to the FAA in the future as required.
- 6.4.3. Convert CADD data into required GIS format³
- 6.4.4. Load into H-JAIA/FAA compliant Geodatabase
- 6.4.5. Enter attributes as required
- 6.4.6. Review data with H-JAIA project stakeholders
- 6.4.7. Merge planning data into H-JAIA Geodatabase.
- 6.5. Research Cadastral Data Cadastral data along with other key features such as runways, buildings and roads has traditionally been combined into Exhibit "A" of an ALP. This task focuses on collecting, converting and loading cadastral data so that the AGIS can produce similar maps.

³ Many H-JAIA planning and engineering drawings are in an airport grid coordinate system. H-JAIA GIS staff have developed an algorithm to accurately convert such data into the Georgia State Plane West coordinate system and will perform any such conversions that are required for this project.

11

Collecting historical parcel data for H-JAIA represents a challenge due to the state of these records. Depicting the current property boundary and identifying parcels not currently owned by H-JAIA that are required for planned projects will be collected. Researching hard-copy county records to prepare historical property data is beyond the scope of this project.

- 6.5.1. Identify source(s) for required features GIS Data (from H-JAIA or others) exist for many of the required features. While data exists for the AirportBoundary, *efforts* already undertaken by H-JAIA to validate it using airport and county records have not yielded useful results. Furthermore, adequate records for historical parcel acquisition do not exist. In an final attempt to uncover existing source data for AirportBoundary and historical parcels acquired, a title company will be engaged to conduct a comprehensive title search for the land owned by the City of Atlanta and operated by its Department of Aviation. If useful electronic data is found, it will be converted and loaded into the AGIS. If not, existing, unverified data will be loaded and recommendations as to how the airport can resolve this discrepancy under another effort will be provided.
- 6.5.2. Obtain data
- 6.5.3. Convert into H-JAIA Geodatabase

- AirportBoundary
- County
- EasementsAndRightsofWay
- FaaRegionArea
- LandUse
- LeaseZone
- Municipality
- Parcel
- State
- Zoning
- 6.6. Utilities Data H-JAIA has collected, converted and consolidated a broad set of data depicting utilities. This data has come from a variety of sources and has to a large degree been validated by H-JAIA staff and contractors using high-resolution aerial imagery, RTK GPS field survey equipment and other means. The comprehensiveness of utilities data and the degree to which it has been validated is shown in the table below:

Fuel
Storm Water
Sewer
Electrical
Communications
Water

Coverage	Validated
100%	80%
80%	30%
100%	70%
60%	20%
60%	20%
80%	30%

As a part of this project, existing utility data will be converted and loaded into ESRI Shape files that are compliant with AC 150/5300-18b and submitted to the FAA. Additional field work to collect and validate utility assets is not included in this project. On-going efforts by H-JAIA to improve this data will result in

- 6.6.1. Identify and consolidate existing sources
- 6.6.2. Convert and load data into H-JAIA Geodatabase
- 6.6.3. Convert data into FAA compliant feature classes. This will involve consolidating numerous utilities point, line and polygon feature classes maintained by H-JAIA into the three feature classes required by the FAA, setting appropriate type codes and consolidating certain attributes.

- UtilityLine
- UtilityPoint
- UtilityPolygon
- 6.7. Load data into H-JAIA Geodatabase The feature classes developed in Tasks 6.2, 6.4, 6.5 and 6.6 will be uploaded into the H-JAIA Geodatabase, which has been designed to be compliant with FAA AC 150/5300-18b.
- 6.8. Quality Assurance Quality control will be performed on the data as it is being prepared. A final quality assurance step, will ensure that all of the data is compliant with FAA requirements before it is uploaded to the FAA's Airports-GIS web site.
- 6.9. Convert data to shape file format Although the H-JAIA Geodatabase has been designed to be compliant with FAA requirements, data must be uploaded to the FAA Airports-GIS web site in a compliant format. Where appropriate, FAA provided data conversion tools will be used. In addition, a tool to export data from the H-JAIA Geodatabase in a compliant format will be developed. In this task, data will be exported from the H-JAIA Geodatabase and converted into FAA compliant Shape files that contain all required attributes.
- 6.10. Submit data to the FAA A final shape file that has been checked for compliance with FAA AC150/5300-18B for each of the feature classes listed in Tasks 6.2, 6.4, 6.5 and 6.6 will be uploaded to the FAA's Airports-GIS web-site by the H-JAIA Project Manager. If any data is not accepted by the FAA, it will be corrected by the consulting team member responsible for the failed component(s). The data will then be rechecked and resubmitted to the FAA Airports-GIS web site.
- 6.11. Prepare Output This project is being conducted under an FAA Pilot Program, where the equipment needed to review, plot and coordinate final maps may not be available prior to the completion of this scope. To ensure that the maps necessary for FAA review and coordination are available in a timely manner, this task will prepare maps similar to traditional ALP drawing sheets. PDF and hard copy plots these sheets will be prepared and submitted to the FAA. The FAA Airports-GIS application will be used to the extent possible. Additional output may need to be prepared to support FAA and H-JAIA review,

approval and collaboration.

- 6.12. Prepare Final Report for FAA A final status report (expected to be 3-5 pages in length) will be drafted by the consulting team and provided to H-JAIA for comment. The final report which includes H-JAIA comments will be prepared and e-mailed to the FAA 2 days prior to a final status meeting during which the results of the project, H-JAIA data maintenance plans, and recommendations to the FAA for similar projects at other airports will be discussed amongst FAA, H-JAIA and consulting team stakeholders.
 - 6.12.1. Summary of Project Status to Date A brief summary of the project status, work completed and any issues encountered will be provided.
 - 6.12.2. Scope of work activities performed Work completed under each task will be reported along with a percent complete for each task. Any issues encountered will also be described along with recommendations to address each. Any deviations from the proposed scope will be discussed and approved in writing by H-JAIA and the FAA. These will be noted in the interim report.
 - 6.12.3. Costs expended to date for each task will be provided. Any tasks which are expected to be completed significantly (i.e. +/- 10%) over or under the original estimate will be noted. Costs will also be tracked by Feature Class.
 - 6.12.4. Recommendations for improvements to FAA policy, guidance, templates, tools, training and process will be documented.
 - 6.12.5. Status Review Meeting A meeting with project stakeholders representing the FAA, H-JAIA and the consulting team will be conducted to review the status report.

Deliverable:

- Final Status Report
- Minutes from Status Meeting
- 7. Implement Data Maintenance Procedures A critical component of this program is to maintain data in the future that complies with FAA requirements. In order to achieve this goal, H-JAIA staff need to be trained on the methods and tools they will use to maintain compliant data.
 - 7.1. Review lessons learned in developing compliant data
 - 7.2. Review the use of FAA provided tools
 - 7.3. Revise H-JAIA GIS Data Maintenance Procedures as required
 - 7.4. Provide training to H-JAIA data maintainers

Deliverable:

- Revised Data Maintenance Procedures
- Training Material
- 8. Project Administration
 - 8.1. Team Internal Meetings In addition to the two interim and one final status meetings conducted with the FAA, the consulting team will conduct monthly status meetings. Any significant deviations from the proposed work plan, schedule or costs identified in these meetings will be communicated to the FAA.

- 8.2. On-Site Coordination The collection of attribute data will require interaction and follow-up with H-JAIA staff in the Planning, Engineering, Operations and Environmental divisions. The consulting team will provide the on-site coordination to ensure that H-JAIA staff are aware of their role and provide the necessary inputs to the consulting team in a timely manner.
- 8.3. Monthly Invoice Preparation The consulting team will prepare and submit invoices to H-JAIA as required by contract on a monthly basis.

Cost

The total cost for completing the tasks as described above is \$797,637. Again, this excludes tasks already completed and funded separately by H-JAIA which contribute this effort. These costs are broken down by major task area as follows

1Register with FAA Airports-GIS Site	\$ 1,615	0.2%
2Establish Geodetic Control	\$ 86,462	11%
3Collect Aerial Photography	\$ 33,295	4%
4Collect Field Survey Data	\$ 162,971	20%
5Complete Obstruction and Airspace Analysis	\$ 100,165	12%
6Prepare Data		
Current Data	\$ 243,584	30%
Planning Data	\$ 60,607	7%
Cadastral Data	\$ 31,934	4%
Utilities Data	\$ 42,083	5%
7Implement Data Maintenance Procedures	\$ 18,861	2%
8Project Administration	\$ 41,060	_ 5%
TOTAL COST	\$ 822,637	100%

\$791,057 of the total cost is for direct labor. \$25,000 of the total cost is for other direct costs including travel, equipment, supplies and materials. 20% of the total project cost is allocated to qualified Disadvantaged Business Enterprises (DBE) firms.

The cost breakdown above is by task. Following is a breakdown of the same total project cost by the type of activity that will be performed.

Data development	\$ 646,276	79%
Coordination & Feedback	\$ 114,752	14%
Data Submittal	\$ 24,209	3%
Data Maintenance Procedures	\$ 18,861	2%
Output Production	\$ 18,538	2%
TOTAL COST	\$ 822 637	100%

Schedule

It will take 10.5 months to complete the work as described above. A detailed project schedule is provided as Attachment A.

Feature Class and Attribute Sources, Responsibilities and Maintainers

A detailed list of all feature classes and attributes defined in AC 150/5300-18b is provided as Attachment B. For each the source of the data, the team member that is responsible for initial data development and that airport staff member who responsible for data maintenance is identified.

GIS Utilities - Phase II Scope Narrative

Subtask 1: Survey Data Collection

Subtask consists of collecting survey grade accuracy (3 centimeters +/-) horizontal and vertical data for storm water structures in Areas I shown on EXHIBIT 1. In addition, data on storm water pipe and structures sizes, materials of construction, and conditions will be collected. All survey and mapping will be in Georgia State Plane Coordinate System, West Zone with North American Datum 1983(CORS) horizontal control and North American Vertical Datum 1988 vertical control and convert to the new H-JAIA Airport Coordinate System utilizing the corrected existing or updated survey monuments established.

Based on information available, it is estimated that there are approximately 4250 structures throughout the Airport generally bounded by the North Loop Road, Riverdale Road, South Loop Road, Sullivan Road, and Clark Howell Road. EXHIBIT 1 generally indicates the total area of the Airport which is divided into seven separate sub-areas. The distribution of known and unknown storm water structures is indicated for each of the seven sub-areas. It is estimated that Area II has 800 structures

The features to be identified and mapped include storm water pipes, box culverts, control structures, headwalls, flared end sections, storm water manholes, curb inlets, junction boxes (blind connections), drop inlets, catch basins, grate inlets, yard inlets, and open ditches. Roof drains will be surveyed and identified as flowing to surface or connecting to a pipe. Connections of piped roof drains to the storm water system will be determined where feasible.

Existing Data Collection and Field Preparation

Prior to commencing the inventory survey Ascend, with assistance from DOA, will compile existing relevant mapping and data in digital and hardcopy forms to assist with identifying structure locations. This data will be used as base files to facilitate correlation of existing GIS records with structures inventoried. It will include relevant existing digital GIS files digital and/or hardcopy "As Built" drawing files, and/or design files. Base files and data dictionary files will be uploaded to the existing GIS geodatabase model and tested prior to collection and uploading of new data.

Upon initiation of the work, an analysis of the existing data of each sub-area will determine if lease owners and DOA will be impacted. If appropriate, notification will be given to the lease owners within the sub-areas that survey activities will be occurring. Also, an initial field review of sub-area will be made to determine where brush clearing may be necessary, where RTK-GPS and/or traditional survey methods are best suited, and route selection for crews.

Inventory and Inspection

Traditional survey (AKA conventional) and Real Time Kinematics (RTK)-Global Positioning System (GPS) techniques will be utilized to gather data. RTK-GPS correction data via network cell phone transmission will be used where possible to collect survey grade accuracy data. A minimum of five (5) EPOCHS will be collected at each structure, while tracking a minimum of five (5) satellites with a PDOP of six (6) or less. If not possible, traditional minimal-length traverse loops will be used to collect the data.

The inventory and inspection process will collect and link, using upstream and downstream node entry, as much positional and connectivity data as possible on the initial visit using conventional electronic total stations and data collectors or RTK VRS GPS for positional data. Attribute and assessment data will be collected using Dell Axim X-51 PDAs, loaded with custom designed software. Keeping the positional data and the attribute and assessment data separate allows for simultaneous or separate collection of the data. Common point numbers will be used to provide for seamless merging of the data sets. The upstream and downstream node entry will

streamline the connectivity process. The combined attribute and corrected GPS positional data will be managed in a GIS database.

All inventory and conditions inspection data for each point or structure will be collected at one time. In addition to the location data, an inspector will have a PDA programmed with forms, including list boxes, check boxes, input/data validation, and other customized functions as required. Data will be correlated by use of common point numbers with point numbers marked by paint marker on structures. Pipes will be linked using upstream and downstream node entry with flow arrows and inverts marked by paint markers as well. Information included in the attribute and assessment tables may include:

- Inspection information (date/time collected, inspector, weather conditions)
- Node information (node name, coordinate locations)
- Structure information (type, top elevation)
- Structure condition (blocked, crushed, sedimentation, etc)
- Drainage network information (upstream/downstream node)
- Pipe/box culvert information (type, shape, size, invert elevation)
- Pipe/box culvert condition (blocked, crushed, sedimentation, etc)
- Buried Structures

Survey data will be collected for those portions of the storm water system that cross the boundary of H-JAIA property up to the first structure beyond the boundary line.

Two (2) field crews will be assigned at all times. If necessary, additional crews will be assigned to expedite the field collection. Field crews will typically consist of three crew members comprised of a crew chief, an instrument operator, and a conditions assessment inspector. All field crews will be equipped with traditional survey equipment as well as RTK-GPS equipment. In addition, each crew will be equipped with specialty items such as spot lights and impact drills to open drop inlets with metal grates.

Data Reduction and Deliverables

The Data Reduction and Deliverable staff will use ERSI ArcGIS 9.3 customized as needed to edit and check the data. The field data will be downloaded at the end of each day to prevent loss of data and allow review of the previous day's work by the office staff on a daily basis.

- Data Reduction. Traditional survey data (x,y,z data) will be reduced and the RTK-GPS data (x,y,z data) will be downloaded, then both x,y,z data sets will be correlated and merged with the attribute data. The GIS data will be utilized on a daily basis for reporting crew productivity, immediate needs, field verification needs, and overall completeness of the inventory data collection.
- Connectivity. Using the downstream and upstream node entry format, the pipes can be connected using StormCAD and then converted to the geodatabase. AutoCAD files will be derived as needed. In addition, a professional with expertise in hydrology will review the data produced by the field crews to insure connectivity of the structures.
- Deliverable Preparation. The Team will use ESRI ArcGIS 9.3 to provide the data in a Geodatabase format
 compatible with DOA's ESRI software. A geodatabase of infrastructure data will be made with structures
 and pipes, as appropriate. Also, metadata files and projection files will be part of the delivery package

All data will be submitted to DOA on a monthly basis for review of progress and the data during the course of the project. Each delivery will contain data for the individual sub-areas in order to break down the inventory into manageable parts for review by DOA staff. A single geodatabase containing the entire storm water inventory for

H-JAIA will be the final deliverable at the end of the project. All geographic data will be delivered with metadata compliant with guidelines established by the Federal Geographic Data Commission (FGDC). Metadata will be delivered in .xml files generated by ESRI ArcCatalog.

ENGINEERING, INC., DELON HAMPTON & ASSOCIATES DESIGN SERVICES WITH ASCEND LLC (ASCEND) A AN APPROPRIATE CONTRACTUAL AGREEMENT FOR FC. A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE BY TRANSPORTATION COMMITTEE ON A TASK ORDER BASIS, AT HARTSFIELD-JACKSON AND STREET SMARTS, IN AN INITIAL AMOUNT OF ONE BUCKLEY, SCHUH & JERNIGAN, INC. (PBS&J) PRIME 6006007929-E, ARCHITECTURAL AND ENGINEERING WANAGEMENT/DESIGN); AND FOR OTHER PURPOSES SHALL BE CHARGED TO AND PAID FROM FUND CONSULTANTS/PROFESSIONAL ITLANTA INTERNATIONAL AIRPORT. ALL SERVICES DESIGN SERVICES FOR THE DEPARTMENT OF AVIATION PROFESSIONAL, ARCHITECTURAL AND ENGINEERING MILLION DOLLARS (\$1,000,000.00) IMITED LIABILITY COMPANY COMPRISED OF POST CCOUNT AND CENTER NUMBER 2H30 (2004 AIRPORT 0 Date Referred Date Referred Referred To: Refferred To: Referred To: Date Referred PERSONAL PAPER REFER 1st ADOPT 2nd READ & REFER REGULAR REPORT REFER ADVERTISE & REFER CONSENT REFER (Do Not Write Above This Line FUND TO PROVIDE B SERVICES) 52400 TEANS FOR THE CON Fay. Adv. Hold (see rev. side) Other Fav, Adv, Hold (see rev. side) Other Committee Date Chair Referred To ABOPTED BY JUL 1 6 2007 Members Committee Members COUNCI Reler To Action Refer To Action Chair Date Fav. Adv. Hold (see rev. side) Owner Fav, Adv, Hold (see rev. side) Other . DIMMINO Committee Membera Menibers Date Raler To Action Chair Date Refer To Action Chair 220 Consent Consent FINAL COUNCIL ACTION ATLANTA CITY COUNCIL PRESIDENT MAYOR'S ACTION 1 6 2007 JUL 1 6 2007 1st & 2nd Readings V Vote CERTIFIED MAYOR Coleton E RC Vote J D 3rd

CITY COUNCIL ATLANTA, GEORGIA

07- L -1459

A RESOLUTION BY TRANSPORTATION COMMITTEE

RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE AN APPROPRIATE CONTRACTUAL AGREEMENT FOR FC-6006007929-E, ARCHITECTURAL AND ENGINEERING DESIGN SERVICES WITH ASCEND LLC (ASCEND) A LIMITED LIABILITY COMPANY COMPRISED OF POST, BUCKLEY, SCHUH & JERNIGAN, INC. (PBS&J) PRIME ENGINEERING, INC., DELON HAMPTON & ASSOCIATES AND STREET SMARTS, IN AN INITIAL AMOUNT OF ONE MILLION DOLLARS (\$1,000,000.00) PROFESSIONAL, **ARCHITECTURAL** AND **ENGINEERING PROVIDE** DESIGN SERVICES FOR THE DEPARTMENT OF AVIATION ON A TASK ORDER BASIS, AT HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT. ALL SERVICES SHALL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER 2H30 (2004 AIRPORT REVENUE BOND FUND: A, B) 524001 (CONSULTANTS/PROFESSIONAL SERVICES) R21E102093CK (CAPITAL DESIGN & MANAGEMENT/DESIGN); AND FOR OTHER PURPOSES.

WHEREAS, the City of Atlanta (the "City") has undertaken capital improvement projects of Architectural and Engineering Design Services for the Hartsfield-Jackson Atlanta International Airport; and

WHEREAS, the City did solicit Request for Proposals from qualified consulting firms for FC-6006007929. Architectural and Engineering Design Services at Hartsfield-Jackson Atlanta International Airport; and

WHEREAS. after review and evaluation of the Proponent's qualifications, analysis of the technical proposals, and oral interview/presentation, the Aviation General Manager and the Chief Procurement Officer recommend the award of said contract to one of the top ranked proponents, ASCEND LLC (ASCEND) is comprised of Post, Buckley, Schuh & Jernigan, Inc. (PBS&J) Prime Engineering, Inc., Delon Hampton & Associates and Street Smarts.

THE CITY COUNCIL OF THE CITY OF ATLANTA GEORGIA HEREBY RESOLVES, that the Mayor is hereby authorized to execute on behalf of the City of Atlanta contract FC-6006007929-E Architectural and Engineering Design Services with ASCEND LLC in an initial amount of One Million Dollars and No Cents (\$1,000,000.00) in the first year to assist the Department of Aviation with Civil Engineering services for the capital improvement projects at Hartsfield Jackson Atlanta International Airport, based on negotiated hourly rates times the agreed upon multiplier.

BE IT FURTHER RESOLVED, that the term of the Contract shall be for three (3) years, with one (1) two (2) year renewal option.

FIT FURTHER RESOLVED, that the City Attorney be and is hereby directed to prepare said Contract for execution by the Mayor, to be approved as to form by the City attorney.

BE IT FURTHER RESOLVED, that the Aviation General Manager will annually establish the compensation limit for ASCEND upon approval of the City Council for each of the remaining two years and option period, if renewed.

BE IT FURTHER RESOLVED, that the City Attorney is directed to prepare the Contract for execution by the Mayor.

BE IT FURTHER RESOLVED, that said contract shall not become binding on the City and the City shall incur no liability nor obligation under it until the contract has been executed by the Mayor, sealed by the Municipal Clerk, approved by the City Attorney as to form, and delivered to the contracting parties.

BE IT FINALLY RESOLVED, that all contracted work will be charged to and paid from Fund, Account and Center Number 21130 (2004 Airport Revenue Bond Fund: A, B) 524001 (Consultant/Professional Services) R21E102093CK (Capital Design & Management/Design).

e copy

ADOPTED by the Council APPROVED by the Mayor

JUL 16, 2007 JUL 19, 2007

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE	ATTN: GREG PRIDGEON
Dept.'s Legislative Liaison:	Anita Williams
Contact Number: 404-53	0-6600
Originating Department:	Aviation
Committee(s) of Purview: _	Transportation
Chief of Staff Deadline:	10/13/09_
Anticipated Committee Meet	ing Date(s):10/28/09
Anticipated Full Council Dat	A
Commissioner Signature:	Jawya
Chief Procurement Officer S	ignature: Xdau Lhm L
CAPTION A RESOLUTION INCREASING THE COMPENSATION LIMIT FOR CONTRACT NO. FC-6006007929-E, ARCHITECTURAL AND ENGINEERING DESIGN SERVICES, WITH ASCEND JOINT VENTURE, LLC, IN AN ADDITIONAL AMOUNT OF \$1,195,172; ALL SERVICES WILL BE CHARGED TO AND PAID FROM FDOA 5502 (AIRPORT RENEWAL AND EXTENSION FUND) 180201 (DOA AVIATION CAPITAL PLANNING & DEVELOPMENT) 5212001 (CONSULTING/ PROFESSIONAL SERVICES) 7563000 (AIRPORT) 00000000 (DEFAULT) 000000 (DEFAULT); AND FOR OTHER PURPOSES.	
FINANCIAL IMPACT (if any) \$1,195,172
Mayor's Staff Only	
Received by CPO:(date) Received by Mayor's Office: /	Received by LO from CPO:(date) Reviewed by:
Submitted to Council:	date) (date)